



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/645,555

08/22/2003

Ali Sazegari

P2807-828

8696

21839 7590 05/28/2009  
BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER

NGO, CHUONG D

ART UNIT

PAPER NUMBER

2193

NOTIFICATION DATE

DELIVERY MODE

05/28/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/645,555	<b>Applicant(s)</b> SAZEGARI ET AL.	
	<b>Examiner</b> Chuong D. Ngo	<b>Art Unit</b> 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,8,9,16,18,19,21-25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,8,9,16,18,19,24,25 and 27 is/are rejected.
- 7) ☒ Claim(s) 16 and 21-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Claims 1,4-6,8,9,18,19,24,25 and 27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For a claimed process to be patent-eligible under § 101, the process must (1) be tied to a particular machine or apparatus that impose meaningful limits on the claim's scope to impart patent-eligibility, or (2) transform a particular article into a different state or thing. (See *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876); and in re Bilski). However, it is clear from claims 1,4-6,8,9,18,19,24,25 and 27 that the claimed method merely performs calculations on data values to obtain calculated data value. The method does not transform a particular a subject matter such as an article or material to a different state or thing even though the claims recite the data values being of a media signal. The input the invention are data values and the output are also data values. Thus the claimed method fails to meet the transformation requirement. Further, the general recitation of a computer system or a vector processing computer system as recited in the claims does not impose any meaningful limits on the claim's scope to impart patent-eligibility of the claimed method. The claimed steps would not be effected if the recitation “computer system” or “vector processing computer system” is changed to others device. Thus, the claimed method are also not tied to a particular machine or apparatus that impose meaningful limits on the claim's scope to impart patent-eligibility. Therefore, the method of claims 1,4-6,8,9,18,19,24,25 and 27 fails to meet the machine-or transform test, and thus is directed to a nonstatutory process.

Art Unit: 2193

2. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betrisey et al. (6,360,023) in view of Hurley (5,235,410).

Betrisey et al. discloses in figure 3 a method for processing an image for display in a computer system including receiving an input display value for a pixel of the image in a first color space (foreground color, background color), generating a corrected display value in a second color space corresponding to the gamma of a display device in accordance with said input display value (311,313); processing said corrected display value by combining the corrected display value with another display value in said second color space to generate a blended display value for said pixel in said second color space to produce a processed display value for said pixel (312); and converting said processed display value to said first color space said processed display value by an inverse function of the generating a corrected display value in a second color space (314). It is noted that Betrisey et al. does not disclose the generating a corrected display value by a second-order polynomial that approximates a power function corresponding to the gamma of a display device, and the converting the processed display value to said first color space by evaluating a polynomial that is the inverse of said second-order polynomial. However, Hurley discloses a generation of a corrected display value by a second-order polynomial that approximates a power function corresponding to the gamma correction (see figure 6). It would have been obvious to a person of ordinary skill in the art to approximate a power function corresponding to the gamma correction and its inverse in Betrisey et al. by a second-order polynomial and the inverse of the second-order polynomial, respectively, as suggested by Hurley, in order to perform the gamma correction and its inverse in a simple and effective

Art Unit: 2193

manner (see Hurley, col. 3, lines 1-3). The approximation would obviously yield an error that is below some prescribed threshold value as claimed.

3. Claims 16 and 21-23 are allowed.

4. Applicant's arguments filed on 03/17/2009 have been fully considered but they are not persuasive.

Regarding the rejection of method claims under 35 USC 101, it is respectfully submitted that the claimed method merely performs calculations on data values to obtain a calculated data value. The method does not transform a particular subject matter such as an article or material to a different state or thing. Even though the claims recite the data values being of a media signal, the input to the invention are data values and the output are also data values. There is no transformation of an article or material to a different state or thing. Further, the general recitation of a computer system or a vector processing computer system as recited in the claims does not impose any meaningful limits on the claim's scope to impart patent-eligibility of the claimed method. The claimed steps would not be effected if the recitation "computer system" or "vector processing computer system" is changed to another device. Therefore, the claimed methods are also not tied to a particular machine or apparatus that impose meaningful limits on the claim's scope to impart patent-eligibility.

Regarding the rejection of claims 18 and 19 under 35 USC 103, applicant's arguments are not persuasive. A gamma correction has a form of a power function, thus an approximation of a gamma correction is an approximation of a power function. Once applying the teaching of

Art Unit: 2193

Hurley to approximating a power function corresponding to the gamma correction in Betrisey et al. by a second-order polynomial in order to perform the gamma correction in a simple and effective manner, the inverse function for converting the processed display value to the first color space would be the inverse of the second-order polynomial. Therefore, it would have been also obvious to a person of ordinary skill in the art to use a polynomial that is the inverse of the second polynomial for converting the processed display value to the first color space as claimed. The approximation would obviously yield an error that is below some prescribed threshold value in order to have an optimal approximation to perform gamma correction.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 2193

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis, Jr. A. Bullock can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/25/2009

/Chuong D Ngo/  
Primary Examiner, Art Unit 2193